

**ABSTRACT OF THE DISCLOSURE**

A smoke sensor and a carbon monoxide sensor are integrated into a common detector housing. The smoke sensor is coupled to a smoke detector control integrated circuit which generates a binary output signal indicative of the presence of smoke. This signal is coupled to a programmed microprocessor in the detector housing. The carbon monoxide sensor is also coupled to the microprocessor. Outputs from the two sensors are processed substantially independently. In the presence of smoke, the smoke alarm is generated by the microprocessor. In the presence of sufficient levels of carbon monoxide, in the absence of smoke, a carbon monoxide alarm will be generated.